

Notes of August 28, 2020 EPA-CES call about the CES-Mendota Class VI Permit Application

Participants: EPA Region 9, CES, Schlumberger, Cadmus

EPA, the permit applicant, and their consultants met to discuss CES's follow up questions (*in italics*) to EPA's August 19, 2020 request for additional information.

How should CES reply to the Questions? Via formal permit modification? Or via a response letter?

A letter is easier for EPA to review. If CES wants to update the permit application, they could make it part of their response. EPA suggested that, after CES responds to all of EPA's questions (multiple requests are expected), they could update their application.

Region 9 will confirm with Headquarters about the intent of the GSDT, but understands that the GSDT does allow submittal of response letters via the Information Request Module. A new complete application (with a new name) could be submitted when the permit application review is complete.

Since images in the submittal document will change, do we need to provide the entire document again, or just the excerpt?

These can be included in the response letter. If some of the images are confidential, CES will need to identify them as such and should not submit them via the GSDT.

When is the response for the Objectives for Pre-op due? How much detail is required for the Objectives for Pre-op?

EPA clarified that it is not requesting a response to the pre operational testing objectives at this time. EPA provided this information in the letter to convey EPA's expectations. EPA would want to know if CES anticipates that it does not agree with an objective or would not be able to provide the type of information identified (if so, they should propose an alternative means by September 30).

What discussions/dialogue will take place once the EPA has reviewed the responses for the Objectives?

After CES submits its responses in September, EPA will review the information provided and either ask follow-up questions, request another call, or inform CES that it has no further questions.

How do we incorporate updates not requested by the EPA?

CES may include additional information in the response letter. CES clarified that this question refers to new maps and information it would like to provide about the secondary confining layer (see additional information below).

Do we need to provide the information requested with respect to the ESA and the NHPA by September 30th? Can we provide the reports that are being prepared for CARB and CEQA review once they have been completed at a later date? Will the analysis under the CARB Protocols and CEQA review be required to be completed and approved in advance of the EPA being able to issue the Permit to Construct?

The requested information to support the ESA and NHPA consultations is not necessarily due on September 30. However, these consultations, which will need to be complete before EPA can issue the UIC permit, involve a lengthy process, so Region 9 would like to start as soon as possible. CES anticipates that, by September, they will be able to report on progress in retaining the appropriate expertise. EPA also recognizes that CES needs to obtain permits with the state and will work to the extent possible to help CES coordinate their submittals.

The seal integrity (continuity, capillary pressure) of our primary confining formation (1st panoche shale) is unknown at this time. Should we plan to characterize the 1st panoche sand as a secondary confining zone and Moreno shale as part of formation testing/pre-operational testing?

Two rounds of pre-operational testing, cover 1st panoche shale and 2nd panoche sand first and then add additional zones if initial results show 1st panoche shale is not a suitable confining layer?

CES would like to provide additional information about the confining zones and the seal integrity to strengthen the information presented in their initial permit application. They asked if it would be acceptable to provide this with the response. Cadmus and EPA both noted that any additional information about the first Panoche shale and the Moreno Shale would support the overall objective of filling in data gaps and therefore would benefit the review.

Because the first Panoche Sand lies between the first Panoche Shale and the Moreno Shale, it would accommodate any minor leakage that makes it through the first Panoche Shale. Any such leakage would be ultimately stopped by the Moreno. The first Panoche Shale is thin (only around 100 ft.) and not a lot is known about it yet. The Moreno is the thick, major confining zone.

Financial responsibility instruments

CES also asked when the financial instruments need to be secured, noting that obtaining the financial backing for some of the more expensive activities will require some flexibility. EPA responded that, based on past Class VI permit applications, the financial instruments are typically not procured until fairly close to the time that the permit is issued. EPA will check with Headquarters about whether any flexibility is available regarding the need to fully fund the instruments at the time construction commences. EPA will provide additional information or clarifications with the financial responsibility questions it will be sending in September.